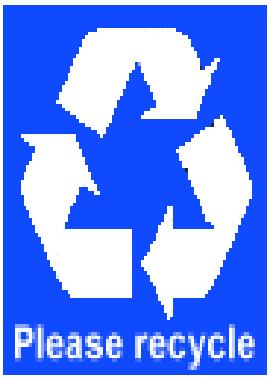

Recycling Lines

Electronic Newsletter

January 2012

Virginia Department of Environmental Quality, Division of Land Protection & Revitalization
P.O. Box 1105, Richmond, Virginia 23218 (804) 698-4029 Fax (804) 698-4224

DEQ's Community Involvement Initiative: The Department of Environmental Quality is dedicated to helping the public better understand DEQ's role in protecting the environment, and to involving the public more effectively in environmental decision making.

Welcome ***to Recycling Lines. If you have suggestions on future topics for the newsletter, please send the information to Steve Coe at steve.coe@deq.virginia.gov. We welcome news submittals from the public and local governments.***

Recycling resolution approved by U.S. Senate

By Editorial Staff, Resource Recycling

A non-binding resolution expressing support for the recycling industry received unanimous approval from the U.S. Senate on November 15, 2011. Senate Resolution 251 was introduced by U.S. Senators Tom Carper (D-Delaware) and Olympia Snowe (R-Maine) last summer with support from the recycling industry. The resolution expresses support "for improvement in the collection, processing, and consumption of recyclable material throughout the United States in order to create well-paying jobs, foster innovation and investment in the United States recycling infrastructure, and stimulate the economy of the United States."

SR 251 includes many notes pointing out the positive impact made by recycling on the U.S. economy, including that U.S. recycling processors directly or indirectly employ over 450,000 workers. According to a press release announcing the resolution's approval says that that accounts "for more than $90 billion in economic output or roughly 0.6 percent of United States' Gross Domestic Product, which is more than the fishing and forestry industries combined."

(See Pages 3 & 4 for the primary text of Senate Resolution 251)

EPA Chief Touts Importance of Recycling

Lisa Jackson, head of EPA, was interviewed on the television show "Dr. Oz" about water safety. Dr. Oz's final question was, "What is the most important message you can send to people?" Ms. Jackson's answer is that if there were an 80% - 90% national recycling rate we could create millions of jobs and recycling would become its own supply chain. Ms. Jackson went on to say that people think it's such a simple thing when they see the green bins set out, but recycling can be its own energy program and water savings program. (To see the full response click on the link below. Move the timer in the control bar that pops up to 3 minutes 55 seconds.)

http://www.doctoroz.com/videos/water-safety-what-you-can-do

HAPPY NEW YEAR!!!

Did You Know?

- Seven organizations will split up the Buffalo Bills' old artificial turf from Ralph Wilson Stadium. The turf is being given to the recipients for free, but the recipients must pay for the installation. In July, the county put out the call for applicants after a new playing surface was installed at the Orchard Park stadium. To be eligible, applicants had to be nonprofits, schools or community groups in Erie County.

2010 U.S. MSW Management Report

EPA's ***Municipal Solid Waste (MSW) Generation, Recycling and Disposal in the United States: Facts and Figures for 2010*** is now available online. This annual fact sheet provides the most recent available data on U.S. waste generation, recycling, and disposal of MSW, from 1960 to 2010.

The fact sheet provides further detail by materials type, including paper, glass, metals, plastics, food scraps, yard trimmings, and other materials. It also examines trends in recycling, combustion, and landfill disposal.

For general information on MSW, http://www.epa.gov/waste/nonhaz/municipal/index.htm

To access the fact sheet, http://www.epa.gov/waste/nonhaz/municipal/pubs/msw_2010_factsheet.pdf

2012 General Assembly

Wondering what new laws or changes to existing laws are being discussed at the General Assembly? You can visit the following website to track proposed bills and resolutions offered up by your elected representatives:

http://leg1.state.va.us/lis.htm (you can search by Bill number, topic, or patron)

Bio-Based Tires in Our Future?

Our automobile tires contain rubber that's extracted from latex-bearing trees and rubber that's synthesized from petroleum feedstocks. As with many natural resources, natural rubber inventories are falling as demand grows across the world. Tire manufacturers are concerned that supplies may not grow fast enough to meet their future needs.

In response, the Industrial biotechnology industries are seeking to develop bio-based rubber ingredients made from sugar to supplement the tire manufacturing demand. The science of microbial fermentation holds promise for making three renewable rubber intermediates: isoprene, isobutene, and butadiene. Motivated by tightening supplies of both natural and synthetic rubber, several companies are already testing the possibilities of synthesizing these chemicals from sugar.

It is expected that this new renewable technology will not be commercially available for another three to five years. The commonly used chemical intermediates come from the cracking of liquid petroleum feedstocks in ethylene plants. A predicted switch to lighter natural gas feedstocks by chemical manufacturers challenges the tire industry to seek out these new sources of isoprene, isobutene, and butadiene.

In recent years, the availability of natural latex rubber, which is used in large amounts in truck, aircraft, agricultural, and earthmover tires, has been limited because of a growing demand and limited growth of rubber plantation acreage.

Stream Cleanup Grant

The Rivanna River Basin Commission (RRBC) and other local groups have received a $267,000 grant to clean up bacterial pollution in Moores Creek caused by human and animal waste. The grant from the state Department of Conservation and Recreation is made up of a mixture of state funds and federal EPA funding, and will be used to address bacterial pollution caused by livestock operations, failing or non-existent septic systems and pet waste.

The pollution in Moores Creek, a tributary of the Rivanna River that drains portions of Albemarle County and the city of Charlottesville, is caused by fecal coliform, which is found in the intestines of all warm-blooded animals, according to the release. The affected segment of the creek is about 6.5 miles long, from the intersection of Route 29 and Teel Lane to the spot where the creek meets the Rivanna.

More than 60 percent of the grant money will be made available to help homeowners and landowners in the Moores Creek watershed fix problems that may be causing bacterial pollution. Possible remedies include exclusion fencing for livestock, connection to existing public sewer lines, septic repairs and installation of composters for pet waste.

Other groups involved in the grant include the Thomas Jefferson Soil & Water Conservation District (TJSWCD), Thomas Jefferson Planning District Commission (TJPDC), and StreamWatch, a citizen group that monitors water quality.

UVA Recycling Champion

The results are in for the U.S. Environmental Protection Agency's 2011 Game Day Challenge, a competition that uses college football team rivalries to increase recycling. As part of the Game Day Challenge, 78 schools across the country each created a waste-reduction plan for one 2011 regular season home football college game. After the games, each school sent in their results to the EPA to see how they stood up against others.

Here are the schools that came out on top:

- Central Connecticut State University took the title of "Waste Minimization Champion" for generating the least amount of waste per attendee.
- University of California, Davis took the title of "Diversion Rate Champion" for getting the highest combined recycling and composting rates.
- **The University of Virginia took the title of "Recycling Champion" for having the highest recycling rate.**
- Marist College in Poughkeepsie, New York took the title of "Organics Reduction Champion" for the highest rate.

As part of the competition, 2.7 million fans diverted more than 500,000 pounds of recyclable materials from football games, preventing nearly 893 tons of carbon dioxide emissions, the equivalent to the annual emissions from 159 passenger vehicles.

For more on the competition, visit the http://www.epa.gov/epawaste/partnerships/wastewise/challenge/gameday/results.htm.

By Editorial Staff, Resource Recycling

Web Links of Interest

- http://cen.acs.org/articles/89/i50/Making-Rubber-Renewables.html (article on tire manufacturing using sugar as a key bio-based ingredient for rubber)
- http://www.greenamerica.org/pubs/greenamerican/articles/NovDec2011/20-plastic-things-you-didnt-know-you-can-recycle.cfm (recycling information for different plastic materials)
- http://www.virginia.org/green (Find out what's new with Virginia Green)
- www.vaco.org (website for the Virginia Association of Counties –VACO)

Excerpted from Congressional Record – Senate (8/2/2011)

SENATE RESOLUTION 251— EXPRESSING SUPPORT FOR IMPROVEMENT IN THE COLLECTION, PROCESSING, AND CONSUMPTION OF RECYCLABLE MATERIALS THROUGHOUT THE UNITED STATES

Mr. CARPER (for himself, Ms. SNOWE, Mrs. MURRAY, Mr. LIEBERMAN, Mr. BLUMENTHAL, Mr. BAUCUS, Ms. STABENOW, Mr. CASEY, Mr. GRASSLEY, Mrs. GILLIBRAND, Mr. TESTER, Mr. WHITEHOUSE, Mr. COONS, and Mr. MERKLEY) submitted the following resolution; which was referred to the Committee on Environment and Public Works:

S. RES. 251

Whereas maximizing the recycling economy in the United States will create and sustain additional well-paying jobs in the United States, further stimulate the economy of the United States, save energy, and conserve valuable natural resources;
Whereas recycling is an important action that people in the United States can take to be environmental stewards;
Whereas municipal recycling rates in the United States steadily increased from 6.6 percent in 1970 to 28.6 percent in 2000, but since 2000, the rate of increase has slowed considerably;
Whereas a decline in manufacturing in the United States has reduced both the supply of and demand for recycled materials;
Whereas recycling allows the United States to recover the critical materials necessary to sustain the recycling economy and protect national security interests in the United States;
Whereas recycling plays an integral role in the sustainable management of materials throughout the life-cycle of a product;
Whereas 46 States have laws promoting the recycling of materials that would otherwise be incinerated or sent to a landfill;
Whereas more than 10,000 communities in the United States have residential recycling and drop-off programs that collect a wide variety of recyclable materials, including paper, steel, aluminum, plastic, glass, and electronics;
Whereas, in addition to residential recycling, the scrap recycling industry in the United States manufactures recyclable materials collected from businesses into commodity-grade materials;
Whereas those commodity-grade materials are used as feedstock to produce new basic materials and finished products in the United States and throughout the world;
Whereas, in 2010, the United States recycling industry collected, processed, and consumed over 130,000,000 metric tons of recyclable material, valued at $77,000,000,000;
Whereas many manufacturers use recycled commodities to make products, saving energy and reducing the need for raw materials, which are generally higher-priced;
Whereas the recycling industry in the United States helps balance the trade deficit and provides emerging economies with the raw materials needed to build countries and participate in the global economy;
Whereas, in 2010, the scrap recycling industry in the United States sold over 44,000,000 metric tons of commodity-grade materials, valued at almost $30,000,000,000, to over 154 countries;
Whereas recycling saves energy by decreasing the amount of energy needed to manufacture the products that people build, buy, and use;
Whereas using recycled materials in place of raw materials can result in energy savings of 92 percent for aluminum cans, 87 percent for mixed plastics, 63 percent for steel cans, 45 percent for recycled newspaper, and 34 percent for recycled glass; and
Whereas a bipartisan Senate Recycling Caucus and a bipartisan House Recycling Caucus were established in 2006 to provide a permanent and long-term way for members of Congress to

obtain in-depth knowledge about the recycling industry and to help promote the many benefits of recycling:

Now, therefore, be it Resolved, That the Senate —

(1) expresses support for improvement in the collection, processing, and consumption of recyclable material throughout the United States in order to create well-paying jobs, foster innovation and investment in the United States recycling infrastructure, and stimulate the economy of the United States;
(2) expresses support for strengthening the manufacturing base in the United States in order to rebuild the domestic economy, which will increase the supply, demand, and consumption of recyclable and recycled materials in the United States;
(3) expresses support for a competitive marketplace for recyclable materials;
(4) expresses support for the trade of recyclable commodities, which is an integral part of the domestic and global economy;
(5) expresses support for policies in the United States that promote recycling of materials, including paper, which is commonly recycled rather than thermally combusted or sent to a landfill;
(6) expresses support for policies in the United States that recognize and promote recyclable materials as essential economic commodities, rather than wastes;
(7) expresses support for policies in the United States that promote using recyclable materials as feedstock to produce new basic materials and finished products throughout the world;
(8) expresses support for research and development of new technologies to more efficiently and effectively recycle materials such as automobile shredder residue and cathode ray tubes;
(9) expresses support for research and development of new technologies to remove materials that are impediments to recycling, such as radioactive material, poly-chlorinated biphenyls, mercury-containing devices, and chlorofluorocarbons;
(10) expresses support for Design for Recycling, to improve the design and manufacture of goods to ensure that, at the end of a useful life, a good can, to the maximum extent practicable, be recycled safely and economically;
(11) recognizes that the scrap recycling industry in the United States is a manufacturing industry that is critical to the future of the United States;
(12) expresses support for policies in the United States that establish the equitable treatment of recycled materials; and
(13) expresses support for the participation of households, businesses, and governmental entities in the United States in recycling programs, where available.